Date: May 9, 2002

Exhibit J

MCW Research Foundation
Discovery Record and Report

1. Brief descriptive title: Cardioprotection by Erythropoietin

2. Full name of discoverer(s), home address(es), and position(s):

   a. John E. Baker, Ph.D., 2131 N. 72 St., Wauwatosa, WI 53213 Professor

   b. Yang Shi, Ph.D., 2116 N. 115 St., Wauwatosa, WI 53226 Post doctoral fellow

   c.

3. Results to be achieved by the practice of this discovery:

   Improved resistance of the heart to ischemia.

4. Brief description of the discovery: (Attach additional pages of description if necessary).

   See attachment

5. Chronology of conception and reduction to practice:

   a. Date of earliest conception: [redacted]

   b. Date of disclosure (orally or in writing) to other persons and names of such persons: [redacted]

   c. First written record pertinent to discovery: [redacted]

   d. Date and result of first test of the discovery: 12/19/01

6. Source, number and size of grant(s) used to support the research relating to this discovery:

   Departmental funding and NIH HL54075 $[redacted]

7. Date and place of publication or anticipated publication: (Attach copy of publication if available.)

   Autumn 2002

8. List any published information on known practices in the field of the discovery which is pertinent:

Witness: Mary Lynne Koenig

Discoverer: J.E. Baker

Name: John E. Baker, Ph.D. Date May 9, 2002

Yang Shi

Name: Yang Shi, Ph.D. Date May 9, 2002

Name: _____ Date

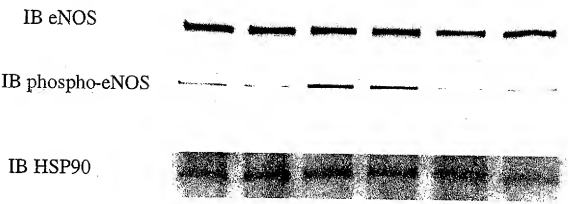
Exhibit J
continued

4. Brief description of the discovery

Erythropoietin is a key blood glycoprotein that initiates and regulates red blood cell production. Erythropoietin is approved by the FDA for human use in the treatment of anemia. We determined if erythropoietin can increase the resistance of the heart to ischemia. Hearts from New Zealand White rabbits were perfused with erythropoietin (0.5 – 10.0 U/ml) for 15 min prior to a global ischemic insult of 30 min followed by 35 min reperfusion. Erythropoietin exhibited a dose-dependent cardioprotective effect with optimal cardioprotection observed at 1.0 U erythropoietin/ml. Cardioprotection was manifest by a highly significant increase in recovery of pre-ischemic left ventricular developed pressure from 48±3% to 75±4%. We believe this is the first demonstration of cardioprotection by erythropoietin.

IP eNOS

11-2-01



		C1	C2	EPO1	EPO2	VEGF1	VEGF2
Ratio:	phospho-eNOS/eNOS	1		6.1		0.6	

Exhibit J
continued

EPO 5units/ml treatment for 24 hrs

IP eNOS

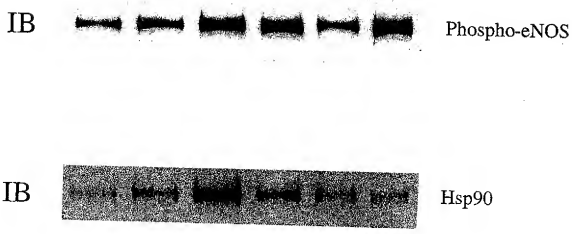


Exhibit J
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